

Thomas Lieb, L*A*I International

Bio

Thomas Lieb has more than 25 years' experience in laser safety and laser safety training, and is President of L*A*I International, an independent company providing consulting, and safety containment systems for material processing lasers. Tom is also a member of ASC Z136 *Safe Use of Lasers*, Chairman of the subcommittee for ANSI Z136.9 *Safe Use of Lasers in a Manufacturing Environment*. He is a past (2010-2012) member of the Board of Directors of the Laser Institute of America (LIA); and involved in the past and current offering of the PAS (Practical Application Seminars), concurrent to the International Laser Safety Conference. He is Chair of IEC/TC 76 on Laser Safety Standard IEC [EN] 60825 and Convener of the subcommittee for ISO/IEC [EN] 11553 *Safety Machines, Laser Processing Machines (General and Hand-held)*. Tom has authored a number of technical papers and articles for publication, and contributed to the CLSO's Best Practices in Laser Safety manual, and the textbook *Laser Materials Processing*, Migliore, et al, Marcel Dekker, NY.

Abstract

Scalability of Fiber Laser Technology and the Challenge to Safe Installations

Fiber laser technology lends itself to a modular design where multiple laser modules can be combined to a single fiber output of considerable power. The material processing market is eager for compact and efficient laser sources. In conjunction with the rapid increase of laser power available for industrial environments, safety considerations must also keep pace.

Industrial fiber lasers of 30, 50, and 100kW will be discussed and strategies for safe installations and work environments will be reviewed.